

**Kolbisepõlemismootorid. Käsitsi käivitamise seadised.
Osa 1: Ohutusnõuded ja katsetamine**

Reciprocating internal combustion engines - Handle starting equipment - Part 1: Safety requirements and tests

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 11102-1:2009 sisaldab Euroopa standardi EN ISO 11102-1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.11.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.09.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 11102-1:2009 consists of the English text of the European standard EN ISO 11102-1:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 23.09.2009.

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English Version

Reciprocating internal combustion engines - Handle starting
equipment - Part 1: Safety requirements and tests (ISO 11102-
1:1997)

Moteurs alternatifs à combustion interne - Dispositifs de
démarrage à la manivelle - Partie 1: Exigences de sécurité
et essais (ISO 11102-1:1997)

Hubkolben - Verbrennungsmotoren Handkurbel-
Starteinrichtungen - Teil 1: Sicherheitstechnische
Anforderungen und Prüfung (ISO 11102-1:1997)

This European Standard was approved by CEN on 24 August 2009.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of ISO 11102-1:1997 has been prepared by Technical Committee ISO/TC 70 "Internal combustion engines" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11102-1:2009 by Technical Committee CEN/TC 270 "Internal combustion engines" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 11102-1:1997.

This European Standard has been prepared under a mandate given to CEN by the Commission of the European Communities and the European Free Trade Association, and supports essential requirements of the EU Machinery Directive (2006/42/EC) and the associated EFTA regulations.

For relationship with EU Directives, see informative Annex ZA and ZB, which are integral parts of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 11102-1:1997 has been approved by CEN as a EN ISO 11102-1:2009 without any modification.

Annex ZA
(informative)

**Relationship between this European Standard and the Essential
Requirements of EU Directive 98/37/EC**

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 98/37/EC on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

WARNING - Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

Annex ZB (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

Reciprocating internal combustion engines — Handle starting equipment

Part 1: Safety requirements and tests

1 Scope

This part of ISO 11102 specifies requirements for handle starting equipment used on reciprocating internal combustion engines for land, rail and marine use, excluding engines used to propel road vehicles and aircraft. It may be applied to engines used to propel road construction, earth moving machines and for other applications where no suitable International Standards exist.

In addition to the technical safety requirements, this part of ISO 11102 describes procedures for checking adherence to these requirements.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 11102. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 11102 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 11102-2:1997, *Reciprocating internal combustion engines — Handle starting equipment — Part 2: Method of testing the angle of disengagement*.

3 Definitions

For the purposes of this part of ISO 11102 the following definitions apply.

3.1 handle starting system

starting system using a crank handle to rotate the engine up to the required firing speed

3.2 automatic disengagement device

device which automatically interrupts the connection between the engine and the starting handle once the engine is running, thus preventing the handle from being turned by the engine

3.3 guide

that part of the handle starting system which guides the starting handle during starting and prevents its being thrown out after disengagement